

DERWENT-ACC-NO: 1983-813626

DERWENT-WEEK: 198345

COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Iron-contg. silica gel - uses as low concn. water vapour detector and indicator in gas mixt.

PATENT-ASSIGNEE: LENINGRAD ZHDANOV UNIV[LEZH]

PRIORITY-DATA: 1981SU-3322344 (July 23, 1981)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>SU 989479 A</u>	January 15, 1983	N/A	002	N/A

INT-CL (IPC): G01N031/22, G01N033/18

ABSTRACTED-PUB-NO: SU 989479A

BASIC-ABSTRACT:

Use of the Fe-contg. silica gel (silochrome) (I) as the water vapour detector and indicator extends the sensitivity of the method to 0.1%, compared with min. of 0.5% detectable using the known V-contg. silica gel (II) suitable for the 0.5-5.0% range. The indicator contains 0.537 mg. atom Fe³⁺/g, which corresponds to a layer of FeCl₂ grps. bound to the surface of the gel.

Tests show that the indicator offers the following range of colours covering the range of water vapour concns. incl. 0, 0.1, 0.2, 0.4, 0.5, 1.0 and 5.0%: green, dark brown, brown, light brown, red, yellow red and yellow, while (II) remains colourless up to 0.5% when it becomes light yellow, bright yellow at 1.0% and bright red at 5%. Bul. 2/15.1.83.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: IRON CONTAIN SILICA GEL LOW CONCENTRATE WATER VAPOUR DETECT

INDICATE GAS MIXTURE

DERWENT-CLASS: J04 S03

CPI-CODES: J04-B01C; J04-C04;

EPI-CODES: S03-E09E;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1983-110026

Non-CPI Secondary Accession Numbers: N1983-201742